



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2012-0802; Directorate Identifier 2012-NM-124-AD; Amendment 39-17145; AD 2011-19-01 R1]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are revising an existing airworthiness directive (AD) that applies to all Airbus Model A318, A319, A320, and A321 series airplanes. The existing AD currently requires revising the airplane flight manual (AFM) to include a procedure intended to address the unsafe condition, an inspection of the firewall connector for signs of arcing if an integrated drive generator (IDG) (or generator (GEN)) was shut down in-flight automatically or using the AFM procedure, and corrective action if necessary; and provides an optional terminating action for certain AFM revision and inspections. This AD was prompted by the potential for an inadvertent error by flightcrew to use the IDG switch instead of the GEN switch when doing the AFM display unit failure procedure required by the existing AD. This AD retains the actions required by the existing AD and clarifies certain terminology. We are issuing this AD to prevent transient loss of certain systems, which could result in the reduced ability of the flightcrew to cope with adverse flight conditions.

**DATES:** This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of September 28, 2011 (76 FR 56279, September 13, 2011).

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of August 13, 2004 (69 FR 45243, July 29, 2004).

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1405; fax (425) 227-1149.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

On September 1, 2011, we issued AD 2011-19-01, Amendment 39-16806 (76 FR 56279, September 13, 2011). That AD required actions intended to address an unsafe condition on the products listed above.

Since we issued AD 2011-19-01, Amendment 39-16806 (76 FR 56279, September 13, 2011), we have received information that there is potential for an inadvertent error by flightcrew to use the “IDG” (integrated drive generator) switch instead of the “GEN” (abbreviation for generator) switch when doing the AFM display unit failure procedure in this AD that requires turning off the integrated drive generator under certain conditions. We find that it is necessary to clarify our intent with the use of

the acronym “IDG” in relation to “GEN,” and to revise paragraphs (h), (i), and (k) of this AD to refer to “GEN.”

#### **FAA’s Determination and Requirements of this AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

#### **FAA’s Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because transient loss of certain systems could result in the reduced ability of the flightcrew to cope with adverse flight conditions. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

#### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2012-0802;

Directorate Identifier 2012-NM-124-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2011-19-01, Amendment 39-16806 (76 FR 56279, September 13, 2011), and adding the following new AD:

**2011-19-01 R1 Airbus:** Amendment 39-17145; Docket No. FAA-2012-0802; Directorate Identifier 2012-NM-124-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD revises AD 2011-19-01, Amendment 39-16806 (76 FR 56279, September 13, 2011).

#### **(c) Applicability**

This AD applies to Airbus Model A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-111, A320-211, A320-212, A320-214, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231, and A321-232 airplanes; certificated in any category; all manufacturer serial numbers.

#### **(d) Subject**

Air Transport Association (ATA) of America Code 31: Instruments.

**(e) Reason**

This AD was prompted by reports of transient loss of certain systems and the potential for an inadvertent error by flightcrew to use the IDG switch instead of the GEN switch when doing a certain airplane flight manual (AFM) display unit failure procedure. We are issuing this AD to prevent transient loss of certain systems, which could result in the reduced ability of the flightcrew to cope with adverse flight conditions.

**(f) Compliance**

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**(g) Retained Revision of Airplane Flight Manual (AFM)**

This paragraph restates the requirements of paragraph (g) of AD 2011-19-01, Amendment 39-16806 (76 FR 56279, September 13, 2011). For Airbus Model A319-131, -132, and -133, A320-231, -232, and -233, and A321-131 and -231 series airplanes, except those airplanes on which Airbus Modification 32943 has been incorporated in production: Within 10 days after August 13, 2004 (the effective date of AD 2004-15-14, Amendment 39-13748 (69 FR 45243, July 29, 2004)), revise the Limitations section of the Airbus A318/319/320/321 AFM to include the information in Temporary Revision (TR) 4.02.00/20, dated May 3, 2004. This may be done by inserting a copy of this TR into the AFM. When this TR has been included in general revisions of the AFM, those general revisions may be inserted into this AFM, provided the relevant information in the general revisions is identical to that in this TR. Accomplishing the actions required by paragraph (j) of this AD terminates the requirements of this paragraph.



**(h) Retained Post-Integrated Drive Generator Shutdown Inspection**

This paragraph restates the requirements of paragraph (h) of AD 2011-19-01, Amendment 39-16806 (76 FR 56279, September 13, 2011), with replacement of the term “IDG” with “GEN.” For Airbus Model A319-131, -132, and -133, A320-231, -232, and -233, and A321-131 and -231 series airplanes, except those airplanes on which Airbus Modification 32943 has been incorporated in production: If a GEN is shut down by the flightcrew in accordance with the TR procedures specified in paragraph (g) of this AD, or if a GEN is shut down automatically before September 28, 2011 (the effective date of AD 2011-19-01), do the actions specified in paragraph (h)(1) or (h)(2) of this AD. If a GEN is shut down automatically on or after September 28, 2011, do the actions specified in paragraph (k) of this AD.

(1) Before further flight, inspect the firewall connector of the affected GEN to detect signs of arcing, in accordance with a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA. If any sign of arcing is detected: Before further flight, either repair the connector or replace the connector with a new connector, in accordance with a method approved by the Manager, International Branch, ANM-116.

(2) Operate the airplane with the affected GEN inoperative in accordance with the provisions and compliance periods specified in the FAA-approved Master Minimum Equipment List or in accordance with a method approved by the Manager, International Branch, ANM-116. Before further use of the affected GEN, do the actions specified in paragraph (h)(1) of this AD. As September 28, 2011 (the effective date of AD

2011-19-01, Amendment 39-16806 (76 FR 56279, September 13, 2011)), operate the airplane in accordance with a method approved by the Manager, International Branch, ANM-116.

Note 1 to paragraph (h) of this AD: Guidance on provisions and compliance periods for operating the airplane with an inoperative, affected GEN can be found in the FAA-approved Master Minimum Equipment List.

**(i) Retained Terminating Action for Paragraphs (g) and (h) of this AD if Done Before September 28, 2011 (the Effective Date of AD 2011-19-01, Amendment 39-16806 (76 FR 56279, September 13, 2011))**

This paragraph restates the requirements of paragraph (i) of AD 2011-19-01, Amendment 39-16806 (76 FR 56279, September 13, 2011), with replacement of the term “IDG” with “GEN.” For Airbus Model A319-131, -132, and -133, A320-231, -232, and -233, and A321-131 and -231 series airplanes, except those airplanes on which Airbus Modification 32943 has been incorporated in production: Replacement of the GEN harnesses and connectors on both engines in accordance with Airbus Service Bulletin A320-71-1030, dated February 27, 2003, before September 28, 2011 (the effective date of AD 2011-19-01), terminates the requirements of paragraphs (g) and (h) of this AD.

Note 2 to paragraph (i) of this AD: Airbus Service Bulletin A320-71-1030, dated February 27, 2003, refers to International Aero Engines Information Bulletin V2500-NAC-70-0736, dated January 28, 2003, as an additional source of guidance for the harness/connector replacement specified in paragraph (i) of this AD.

**(j) Retained AFM Revision**

This paragraph restates the requirements of paragraph (j) of AD 2011-19-01, Amendment 39-16806 (76 FR 56279, September 13, 2011). For all airplanes: Within 10 days after September 28, 2011 (the effective date of AD 2011-19-01), revise the applicable section of the Airbus A318/319/320/321 AFM to include the information in Figure 1 to paragraph (j) of this AD or the information in Airbus TR TR112, Issue 1.1, dated November 29, 2010, to the Airbus A318/319/320/321 AFM. This may be done by inserting a copy of this AD or Airbus TR TR112, Issue 1.1, dated November 29, 2010, in the AFM. Accomplishing the actions required by this paragraph terminates the requirements of paragraph (g) of this AD.

Note 3 to paragraph (j) of this AD: When the information in Figure 1 to paragraph (j) of this AD or Airbus TR TR112, Issue 1.1, dated November 29, 2010, to the Airbus A318/319/320/321 AFM, has been included in the applicable section of the general revisions of the AFM, the general revisions may be inserted into the AFM, and the copy of this AD may be removed from the AFM, provided the relevant information in the general revisions is identical to that in Figure 1 to paragraph (j) of this AD or Airbus TR TR112, Issue 1.1, dated November 29, 2010.

## DISPLAY UNIT FAILURE

### ■ Affected DU blank or display distorted:

Turn off affected DU as required.

- **If ECAM DUs affected:**

Use ECAM/ND SEL

- **If EFIS DUs affected:**

Use PFD/ND XFR.

### ■ Diagonal line or "INVALID DATA" on affected DU:

Attempt to recover affected DU by using associated DMC switching.

- **If unsuccessful:**

Turn off then on affected DU.

### ■ Inversion of EWD and SD displays:

Turn off then on ECAM upper display.

### ■ Affected DU(s) or MCDU flashes intermittently:

- **If Captain PFD or ND, both ECAM DUs or upper ECAM DU, or MCDU 1 is (are) affected:**

Turn off GEN 1.

- **If DU(s) stop(s) flashing:**

Keep GEN 1 off for the rest of the flight.

Use the sideslip indication to verify if the rudder trim needs to be reset. If necessary, reset the rudder trim.

*Note: Intermittent Electrical Power Supply Interruptions may cause offset in the rudder trim.*

Select AP and/or autothrust as required.

APU may be started (*Refer to NORM-49 Auxiliary Power Unit (APU)*) and APU generator may be used (if available).

- **If DU(s) do(es) not stop flashing:**

Restore GEN 1.

- **If First Officer PFD or ND, lower ECAM DU, or MCDU 2 is (are) affected:**

Turn off GEN 2.

- **If DU(s) stop(s) flashing:**

Keep GEN 2 off for the rest of the flight.

Use the sideslip indication to verify if the rudder trim needs to be reset. If necessary, reset the rudder trim.

*Note: Intermittent Electrical Power Supply Interruptions may cause offset in the rudder trim.*

Select AP and/or autothrust as required.

APU may be started (*Refer to NORM-49 Auxiliary Power Unit (APU)*) and APU generator may be used (if available).

- **If DU(s) do(es) not stop flashing:**

Restore GEN 2.

Figure 1 to Paragraph (j)

**(k) Retained Post-Integrated Drive Generator Shutdown Inspection**

This paragraph restates the requirements of paragraph (k) of AD 2011-19-01, Amendment 39-16806 (76 FR 56279, September 13, 2011), with replacement of the term “IDG” with “GEN.” For all airplanes: If a GEN is shut down by the flightcrew in accordance with the TR procedures specified in paragraph (j) of this AD, or if a GEN is shut down automatically on or after September 28, 2011 (the effective date of AD 2011-19-01), do the actions specified in paragraph (k)(1) or (k)(2) of this AD.

(1) Before further flight, inspect the firewall connector of the affected GEN to detect signs of arcing, in accordance with a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA. If any sign of arcing is detected: Before further flight, either repair the connector or replace the connector with a new connector, in accordance with a method approved by the Manager, International Branch, ANM-116.

(2) Operate the airplane with the affected GEN inoperative in accordance with a method approved by the Manager, International Branch, ANM-116. Before further use of the affected GEN, do the actions specified in paragraph (k)(1) of this AD.

Note 4 to paragraph (k) of this AD: Guidance on provisions and compliance periods for operating the airplane with an inoperative, affected GEN can be found in the FAA-approved Master Minimum Equipment List.

**(l) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1405; fax (425) 227-1149 Information may be e-mailed to: [9-ANM-116-AMOC-REQUESTS@faa.gov](mailto:9-ANM-116-AMOC-REQUESTS@faa.gov). Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD. AMOCs approved previously for AD 2004-15-14, Amendment 39-13748 (69 FR 45243, July 29, 2004), are acceptable for the corresponding provisions of this AD. AMOCs approved previously in accordance with AD 2011-19-01, Amendment 39-16806 (76 FR 56279, September 13, 2011), are not approved as AMOCs with this AD.

**(2) Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**(m) Related Information**

Refer to MCAI European Aviation Safety Agency (EASA) Airworthiness Directive 2011-0142, dated July 25, 2011, and the service information identified in paragraphs (m)(1), (m)(2), and (m)(3) of this AD for related information.

(1) Airbus TR 4.02.00/20, dated May 3, 2004, to the Airbus A318/319/320/321 AFM.

(2) Airbus TR TR112, Issue 1.1, dated November 29, 2010, to the Airbus A318/319/320/321 AFM.

(3) Airbus Service Bulletin A320-71-1030, dated February 27, 2003.

**(n) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(3) The following service information was approved for IBR on September 28, 2011 (76 FR 56279, September 13, 2011).

(i) Airbus Temporary Revision TR112, Issue 1.1, dated November 29, 2010, to the Airbus A318/319/320/321 (AFM) Airplane Flight Manual.

(ii) Reserved.

(4) The following service information was approved for IBR on August 13, 2004 (69 FR 45243, July 29, 2004).

(i) Airbus Service Bulletin A320-71-1030, dated February 27, 2003.

(ii) Airbus Temporary Revision 4.02.00/20, dated May 3, 2004, to the Airbus A318/319/320/321 AFM (Airplane Flight Manual).

(5) For Airbus service information identified in this AD, contact Airbus, Airworthiness Office – EAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; e-mail: [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com); Internet <http://www.airbus.com>.

(6) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(7) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on July 23, 2012.

Kalene C. Yanamura,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.



